



OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/835,976A

DATE: 03/13/2002
TIME: 11:47:11

Input Set : A:\EP.txt
Output Set: N:\CRF3\03132002\I835976A.raw

**Does Not Comply
Corrected Diskette Needed**

3 <110> APPLICANT: Mount, David B.
4 Delpire, Eric
5 Gamba, Gerardo
6 Alfred L. George, Jr.
8 <120> TITLE OF INVENTION: PURIFIED AND ISOLATED POTASSIUM-CHLORIDE COTRANSPORTER
NUCLEIC ACIDS AND
9 POLYPEPTIDES AND
10 THERAPEUTIC AND SCREENING METHODS USING SAME
12 <130> FILE REFERENCE: Attorney Docket No. 1242-26-2
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/835,976A
C--> 15 <141> CURRENT FILING DATE: 2001-04-16
17 <160> NUMBER OF SEQ ID NOS: 131
19 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

4075 <210> SEQ ID NO: 14
4076 <211> LENGTH: 1083
4077 <212> TYPE: PRT
4078 <213> ORGANISM: mouse
4080 <220> FEATURE:
4081 <221> NAME/KEY: misc_feature
4082 <222> LOCATION: (71)
4083 <223> OTHER INFORMATION: Xaa=Leu or Ile
4085 <220> FEATURE:
4086 <221> NAME/KEY: misc_feature
4087 <222> LOCATION: (467)
4088 <223> OTHER INFORMATION: Xaa=Leu or Ile
4090 <220> FEATURE:
4091 <221> NAME/KEY: misc_feature
4092 <222> LOCATION: (639)
4093 <223> OTHER INFORMATION: Xaa=Leu or Ile
4095 <400> SEQUENCE: 14
4096 Met Pro Thr Asn Phe Thr Val Val Pro Val Glu Ala Arg Ala Asp Gly
4097 1 5 10 15
4099 Ala Gly Asp Glu Ala Ala Glu Arg Thr Glu Glu Pro Glu Ser Pro Glu
4100 20 25 30
4102 Ser Val Asp Gln Thr Ser Pro Thr Pro Gly Asp Gly Asn Pro Arg Glu
4103 35 40 45
4105 Asn Ser Pro Phe Ile Asn Asn Val Glu Val Glu Arg Glu Ser Tyr Phe
4106 50 55 60
4108 Glu Gly Lys Asn Met Ala Xaa Phe Glu Glu Glu Met Asp Ser Asn Pro
4109 65 70 75 80

pp 1-4

*what about Xaa at
location 155? (p.2)*

*what about Xaa at
location 586? (p.3)*

*what about
Xaa at
location 1023?
(p.4)*

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```

4111 Met Val Ser Ser Leu Leu Asn Lys Leu Ala Asn Tyr Thr Asn Leu Ser
4112                               85                               90                               95
4114 Gln Gly Val Val Glu His Glu Glu Asp Glu Asp Ser Arg Arg Arg Glu
4115                               100                               105                               110
4117 Val Lys Ala Pro Arg Met Gly Thr Phe Ile Gly Val Tyr Leu Pro Cys
4118                               115                               120                               125
4120 Leu Gln Asn Ile Leu Gly Val Ile Leu Phe Leu Arg Leu Thr Trp Ile
4121                               130                               135                               140
W--> 4123 Val Gly Ala Ala Gly Val Met Glu Ser Phe Xaa Ile Val Ala Met Cys
4124 145                               150                               155                               160
4126 Cys Thr Cys Thr Met Leu Thr Ala Ile Ser Met Ser Ala Ile Ala Thr
4127                               165                               170                               175
4129 Asn Gly Val Val Pro Ala Gly Gly Ser Tyr Tyr Met Ile Ser Arg Ser
4130                               180                               185                               190
4132 Leu Gly Pro Glu Phe Gly Gly Ala Val Gly Leu Cys Phe Tyr Leu Gly
4133                               195                               200                               205
4135 Thr Thr Phe Ala Gly Ala Met Tyr Ile Leu Gly Thr Ile Glu Ile Phe
4136                               210                               215                               220
4138 Leu Thr Tyr Ile Ser Pro Ser Ala Ala Ile Phe Gln Ala Glu Thr Ala
4139 225                               230                               235                               240
4141 Asp Gly Glu Ala Ala Leu Leu Asn Asn Met Arg Val Tyr Gly Ser
4142                               245                               250                               255
4144 Cys Ala Leu Ala Leu Met Ala Val Val Val Phe Val Gly Val Lys Tyr
4145                               260                               265                               270
4147 Val Asn Lys Leu Ala Leu Val Phe Leu Ala Cys Val Val Leu Ser Ile
4148                               275                               280                               285
4150 Leu Ala Ile Tyr Ala Gly Val Ile Lys Thr Ala Phe Ala Pro Pro Asp
4151                               290                               295                               300
4153 Ile Pro Val Cys Leu Leu Gly Asn Arg Thr Leu Ala Asn Arg Asn Phe
4154 305                               310                               315                               320
4156 Asp Thr Cys Ala Lys Met Gln Val Val Ser Asn Gly Thr Val Thr Thr
4157                               325                               330                               335
4159 Ala Leu Trp Arg Leu Phe Cys Asn Gly Ser Ser Leu Gly Ala Thr Cys
4160                               340                               345                               350
4162 Asp Glu Tyr Phe Ala Gln Asn Asn Val Thr Glu Ile Gln Gly Ile Pro
4163                               355                               360                               365
4165 Gly Val Ala Ser Gly Val Phe Leu Asp Asn Leu Trp Ser Thr Tyr Ser
4166                               370                               375                               380
4168 Asp Lys Gly Ala Phe Val Glu Lys Lys Gly Val Ser Ser Val Pro Val
4169 385                               390                               395                               400
4171 Ser Glu Glu Ser Arg Pro Gly Gly Leu Pro Tyr Val Leu Thr Asp Ile
4172                               405                               410                               415
4174 Met Thr Tyr Phe Thr Met Leu Val Gly Ile Tyr Phe Pro Ser Val Thr
4175                               420                               425                               430
4177 Gly Ile Met Ala Gly Ser Asn Arg Ser Gly Asp Leu Lys Asp Ala Gln
4178                               435                               440                               445
4180 Lys Ser Ile Pro Thr Gly Thr Ile Leu Ala Ile Val Thr Thr Ser Phe
4181                               450                               455                               460
W 4183 Ile Tyr Xaa Ser Cys Ile Val Leu Phe Gly Ala Cys Ile Glu Gly Val

```

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```

4184 465          470          475          480
4186 Val Leu Arg Asp Lys Phe Gly Glu Ala Leu Gln Gly Asn Leu Val Ile
4187          485          490          495
4189 Gly Met Leu Ala Trp Pro Ser Pro Trp Val Ile Val Ile Gly Ser Phe
4190          500          505          510
4192 Phe Ser Thr Cys Gly Ala Gly Leu Gln Ser Leu Thr Gly Ala Pro Arg
4193          515          520          525
4195 Leu Leu Gln Ala Ile Ala Arg Asp Gly Ile Ile Pro Phe Leu Gln Val
4196          530          535          540
4198 Phe Gly His Gly Lys Ala Asn Gly Glu Pro Thr Trp Ala Leu Leu Leu
4199 545          550          555          560
4201 Thr Ala Leu Ile Cys Glu Thr Gly Ile Leu Ile Ala Ser Leu Asp Ser
4202          565          570          575
W--> 4204 Val Ala Pro Ile Leu Ser Met Phe Phe Xaa Met Cys Tyr Met Phe Val
4205          580          585          590
4207 Asn Leu Ala Cys Ala Val Gln Thr Leu Leu Arg Thr Pro Asn Trp Arg
4208          595          600          605
4210 Pro Arg Phe Lys Phe Tyr His Trp Thr Leu Ser Phe Leu Gly Met Ser
4211          610          615          620
W-> 4213 Leu Cys Leu Ala Leu Met Phe Ile Cys Ser Trp Tyr Tyr Ala Xaa Phe
4214 625          630          635          640
4216 Ala Met Leu Ile Ala Gly Cys Ile Tyr Lys Tyr Ile Glu Tyr Arg Gly
4217          645          650          655
4219 Ala Glu Lys Glu Trp Gly Asp Gly Ile Arg Gly Leu Ser Leu Asn Ala
4220          660          665          670
4222 Ala Arg Tyr Ala Leu Leu Arg Val Glu His Gly Pro Pro His Thr Lys
4223          675          680          685
4225 Asn Trp Arg Pro Gln Val Leu Val Met Leu Asn Leu Asp Ser Glu Gln
4226          690          695          700
4228 Cys Val Lys His Pro Arg Leu Leu Ser Phe Thr Ser Gln Leu Lys Ala
4229 705          710          715          720
4231 Gly Lys Gly Leu Thr Ile Val Gly Ser Val Leu Glu Gly Thr Tyr Leu
4232          725          730          735
4234 Asp Lys His Val Glu Ala Gln Arg Ala Glu Glu Asn Ile Arg Ser Leu
4235          740          745          750
4237 Met Ser Ala Glu Lys Thr Lys Gly Phe Cys Gln Leu Val Val Ser Ser
4238          755          760          765
4240 Asn Leu Arg Asp Gly Ala Ser His Leu Ile Gln Ser Ala Gly Leu Gly
4241          770          775          780
4243 Gly Met Lys His Asn Thr Val Leu Met Ala Trp Pro Glu Ala Trp Lys
4244 785          790          795          800
4246 Glu Ala Asp Asn Pro Phe Ser Trp Lys Asn Phe Val Asp Thr Val Arg
4247          805          810          815
4249 Asp Thr Thr Ala Ala His Gln Ala Leu Leu Val Ala Lys Asn Ile Asp
4250          820          825          830
4252 Leu Phe Pro Gln Asn Gln Glu Arg Phe Ser Asp Gly Asn Ile Asp Val
4253          835          840          845
4255 Trp Trp Ile Val His Asp Gly Gly Met Leu Met Leu Leu Pro Phe Leu
4256          850          855          860

```

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

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```

4258 Leu Arg Gln His Lys Val Trp Arg Lys Cys Arg Met Arg Ile Phe Thr
4259      865      870      875      880
4261 Val Ala Gln Val Asp Asn Ser Ile Gln Met Lys Lys Asp Leu Gln
4262      885      890      895
4264 Met Phe Leu Tyr His Leu Arg Ile Ser Ala Glu Val Glu Val Val Glu
4265      900      905      910
4267 Met Val Glu Asn Asp Ile Ser Ala Phe Thr Tyr Glu Lys Thr Leu Met
4268      915      920      925
4270 Met Glu Gln Arg Ser Gln Met Leu Lys Gln Met Gln Leu Ser Lys Asn
4271      930      935      940
4273 Glu Arg Glu Arg Glu Ala Gln Leu Ile His Asp Arg Asn Thr Ala Ser
4274 945      950      955      960
4276 His Thr Thr Ala Thr Ala Arg Thr Gln Ala Pro Pro Thr Pro Asp Lys
4277      965      970      975
4279 Val Gln Met Thr Trp Thr Lys Glu Lys Leu Ile Ala Glu Lys His Arg
4280      980      985      990
4282 Asn Lys Asp Thr Gly Pro Ser Gly Phe Lys Asp Leu Phe Ser Leu Lys
4283      995      1000      1005
W--> 4285 Pro Asp Gln Ser Asn Val Arg Arg Met His Thr Ala Val Lys Xaa Asn
4286      1010      1015      1020
4288 Gly Val Val Leu Asn Lys Ser Gln Asp Ala Gln Leu Val Leu Leu Asn
E--> 4289 1025      1030      1035      1040
4291 Met Pro Gly Pro Pro Lys Ser Arg Gln Gly Asp Glu Asn Tyr Met Glu
4292      1045      1050      1055
4294 Phe Leu Glu Val Leu Thr Glu Gly Leu Asn Arg Val Leu Leu Val Arg
E--> 4295      1060      1065      1070
4297 Gly Gly Gly Arg Glu Val Ile Thr Ile Tyr Ser
4298      1075      1080

```

see below

1) begin the amino acid number directly below the first letter of the amino acid. Do not have any part of the number under the letters of the next amino acid.

e.g. Lys | S | Ser
1030 | e |

2) When numbering the last amino acid on a line, please end the number directly below the last letter of the amino acid

Leu | S | Asn
1040 | e |

VERIFICATION SUMMARY

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Input Set : A:\EP.txt

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L:14 M:270 C: Current Application Number differs, Replaced Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:59 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:67 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:600 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:981 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:1062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:1176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:1239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1492 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:1630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:1729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:1819 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:1858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1926 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:1927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:2062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:2063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:2510 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2738 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:2895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:2982 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:3063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:3143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11

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L:3343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:3524 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:3569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:4289 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:14
M:332 Repeated in SeqNo=14
L:6706 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:111
L:6834 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:112
L:7185 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:131